

ABSTRACT OF THE DISCLOSURE

An orthopedic fastener device based on a strong central shaft that is threaded in a one end region and that presents a ramp surface in the other end region. The ramp end is inserted down-hole a bore in bone while an expandable first collet having bendable circumferential flukes is snug to the shaft, presenting a diameter less than the bore. Partial axial withdrawal of the shaft from the bore forces the first collet into and against the shaft's ramp region, causing the collet's flukes to splay and strongly compressively engage the bone, thereby permanently anchoring the fastener's first end. Soft tissue, normally a ligament, is slipped over the shaft region extending beyond the bone, and is optionally grasped by a toothed washer. Another, second, split collet -- initially expanded in its internal diameter that has and presents threads -- slides along the shaft so as to tension the ligament, compressing it in position against the bone. A sleeve is forcibly slid over the second split collet by use of a tool so as to contract the second split collet against the shaft, locking tight the ligament against the bone at the position of the bore. The second collet may thereafter be rotated on the shaft in the manner of a screw so as to variably tension the ligament. Any and all parts may be made from bio-absorbable materials.

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